REMARKS

The Office Action mailed June 15, 2006 has been reviewed and carefully considered. Claims 1, 11, 21, 31 and 32 have been amended. Claims 1-32 are pending in the application.

On page 2 of the Office Action, claim 1 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Office Action stated that "the medium" in line 1 of claim 1 lacked antecedent basis.

Applicant respectfully traverses the rejections, but in the interest of expediting prosecution has amended the claim to overcome the rejection. Applicant submits that the amendment to the claim does not narrow or change the scope of the invention.

On pages 2-3 of the Office Action, claims 1-2, 5, 7, 8, 10-12, 15, 17-18, 20-23, 26, 28-29 and 31-32 were rejected under 35 U.S.C. § 102 as being anticipated by Hanson.

On page 4 of the Office Action, claims 6, 9, 16, 19, 27 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hanson in view of Turk et al.

On page 5 of the Office Action, 3-4, 13-14 and 24-25 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant respectfully traverses the rejections, but in the interest of expediting prosecution have amended the claims to more particularly distinguish the invention over the cited reference.

Hanson discloses a counting approach for identifying the last data block of a data sector. According to Hanson, the data sector has a predefined size, and, with knowledge of an expected amount of data that will be read during the read operation and counting an amount of data transferred out of the data channel during the read operation, the start of the last block can be

detected using the counted amount of transferred data. For example, the last block can be detected when the expected amount of data is not an integer multiple of the predefined size of the data sector (e.g., a partial last data block).

Furthermore, Hanson discloses that the state of the read gate input 328 to the data channel can be monitored by a state detector (not shown) to detect a state change of the read gate input 328 as the read gate input transitions from an active state to an inactive state. When the read gate input 328 goes active, a read operation begins. When the read gate input 328 transitions to inactive, an internal timer in the channel delays the end of the read operation to account for decoder processing delay.

As such, when the read gate input 328 goes inactive, the next block to be processed will be the last data block 323 of the data sector.

In contrast, independent claims 1, 11, 21, 31 and 32 of the present application recite that a data channel gate signal is detected and a counter for counting to a predetermined count upon detection of the gate signal is initiated. The counter is reset each time the predetermined count is reached. The gate signal is deasserted a programmable length before the end of the last data byte. The counter is stopped upon deassertion of the gate signal. A size of a last data block is calculated according to a remainder in the counter after the counter is stopped.

Hanson fails to suggest a gate signal is deasserted a programmable length before the end of the last data byte. Hanson also fails to suggest calculating a size of a last data block according to a remainder in the counter after the counter is stopped a programmable length before the end of the last data byte.

Rather, Hanson merely discloses that a counter counts an expected amount of data transferred out of the data channel. Thus, knowing an amount of data to be read during the read

operation, the last block is detected when the expected amount of data is not an integer multiple of the predefined size of the data sector. Hanson does not mention resetting the counter or identifying a remainder in the counter as the length of the last data block. In addition, Hanson merely identifies the last data block 323 of the data sector when the read gate input 328 goes inactive.

Accordingly, independent claims 1, 11, 21, 31 and 32 are patentable over Hanson.

Turk et al. fail to overcome the deficiencies of Hanson. Turk et al. are merely cited as teaching run-length-limited encoding/decoding schemes. However, Turk et al. fail to disclose, teach or suggest a gate signal is deasserted a programmable length before the end of the last data byte. Turk et al. also fails to disclose, teach or suggest resetting the counter or identifying a remainder in the counter as the length of the last data block.

Accordingly, Hanson and Turk et al., alone or in combination, fail to disclose, teach or suggest Applicants' invention as recited in independent claims 1, 11, 21, 31 and 32.

Dependent claims 2-10, 12-20 and 22-30 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claims 1, 11 and 21, respectively. Further dependent claims 2-10, 12-20 and 22-30 recite additional novel elements and limitations. Applicants reserve the right to argue independently the patentability of these additional novel aspects. Therefore, Applicants respectfully submit that dependent claims 2-10, 12-20 and 22-30 are patentable over the cited references.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 423-757-0264.

Respectfully submitted,

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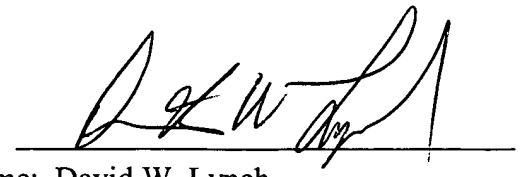
By: 

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